

**Certificate Course in Electrical and Electronics
Engineering with Specialization
“ELECTRICAL DRIVES”**

Held On


26th March to 30th March 2019



**Department of Electrical & Electronics Engineering,
KG Reddy College of Engineering & Technology**

Chilkur(Village), Moinabad(Mandal), Hyderabad RR Dist-501504


Course coordinator


Principal
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SUMMARY REPORT OF ELECTRICAL DRIVES

About the Course

The certificate course on Electrical drives is concluded its work successfully by department of electrical and electronics engineering (EEE) in KG ready college of Engineering and technology (KGR CET), Hyderabad, Telangana. This course is a forum to bring together students to discuss innovative ideas and diverse topics of this course on next generation of information technologies. The Department has taken a new step for students to improve the quality of study through this course and become most wide scale, extensive, spectacular event in electrical and electronics engineering. The six days course was held in two locations of the department (a) Department E-learning room for theory class and (b) Department laboratory for practical class.

In the most basic terms, an Electrical drives is a motor which can be controlled. It is essentially built to withstand very harsh industrial environments.

It is a distinctive form of computer device designed for use in industrial control systems. It has a robust construction and unique functional features such as sequential control, ease of programming, timers and counters, easy-to-use hardware and reliable controlling capabilities.

Scope of the Course

This program focuses in imparting education in the field of power electronics and its applications to electrical machines, drives, industrial equipments, and power systems. The program also emphasizes on design, modeling and analysis of conventional and advanced electrical machines.

This field is changing very rapidly due to intensive research taking place in the areas of power semiconductor devices and digital signal processing. Hence it is the need of the day to have state-of-art knowledge in this field to cater to the requirements of industry in a better way. Developments of advanced topologies of electrical machines have also widened the scope of power electronic controllers. With this in view, certificate (UG) program in EEE with specialization in Electric Drives and Control is offered.

The following industries provide opportunities for placement of the graduates of this programme

- Placement in leading core companies like Hyundai, GE, TVS Electronics, Blue Star Infotech, BSNL Nokia, Texas instruments, Analog Devices, Honeywell, Tata Elxi, IBM etc..
- All R&D and Academic Institutions involved in R&D in the areas of Power Electronics Technology, Electrical Machine Design.

.Objectives of the course

Describe the structure of Electric Drive systems and their role in various applications such as flexible production systems, energy conservation, renewable energy, transportation etc., making Electric Drives an enabling technology. Understand basic requirements placed by mechanical systems on electric drives. Review phasors and three-phase electric circuits. Understand the basic principles of power electronics in drives using switch-mode converters and pulse width modulation to synthesize the voltages in dc and ac motor drives.